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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/786,033	07/03/2001	Mark Henry Pausch	011420102	5078

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EXAMINER

JIANG, DONG

ART UNIT	PAPER NUMBER
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1646

DATE MAILED: 01/02/2003

11

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/786,033

Applicant(s)

PAUSCH ET AL.

Examiner

Dong Jiang

Art Unit

1646

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-29 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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### DETAILED ACTION

The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 14-17, 20, 24-29, 32, 33, and 35-38 been renumbered 13-29.

#### *Election/Restrictions*

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1, 2, 4-7, 9, 13, 15-22, 24, 25, 28 and 29, drawn to a yeast cell comprising a nucleic acid encoding a modified muscarinic acetylcholine receptor, wherein the modification promotes agonist stimulated growth.

Group II, claim(s) 1, 3 in part, 4-7, 9, 13, 15-21, 23 in part, 24, 25, 28 and 29, drawn to a yeast cell comprising a nucleic acid encoding a modified muscarinic acetylcholine receptor, wherein the modification results in improved coupling between the receptor and a G protein.

Group III, claim(s) 1, 3 in part, 4-7, 9, 13, 15-21, 23 in part, 24, 25, 28 and 29, drawn to a yeast cell comprising a nucleic acid encoding a modified muscarinic acetylcholine receptor, wherein the modification results in failure of the receptor to interact with desensitization machinery.

Group IV, claim(s) 1, 2, 4-7, 10, 13, 15-22, 24, 25, 28 and 29, drawn to a yeast cell comprising a nucleic acid encoding a modified cholecystokinin CCKB receptor, wherein the modification promotes agonist stimulated growth.

Group V, claim(s) 1, 3 in part, 4-7, 10, 13, 15-21, 23 in part, 24, 25, 28 and 29, drawn to a yeast cell comprising a nucleic acid encoding a modified cholecystokinin CCKB receptor, wherein the modification results in improved coupling between the receptor and a G protein.

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Group VI, claim(s) 1, 3 in part, 4-7, 10, 13, 15-21, 23 in part, 24, 25, 28 and 29, drawn to a yeast cell comprising a nucleic acid encoding a modified cholecystokinin CCKB receptor, wherein the modification results in failure of the receptor to interact with desensitization machinery.

Group VII, claim(s) 1, 2, 4-6, 11, 13-22, 24, 25, 28 and 29, drawn a yeast cell comprising a nucleic acid encoding a modified somatostatin receptor, wherein the modification promotes agonist stimulated growth.

Group VIII, claim(s) 1, 3 in part, 4-6, 11, 13-21, 23 in part, 24, 25, 28 and 29, drawn to a yeast cell comprising a nucleic acid encoding a modified somatostatin receptor, wherein the modification results in improved coupling between the receptor and a G protein.

Group IX, claim(s) 1, 3 in part, 4-6, 11, 13-21, 23 in part, 24, 25, 28 and 29, drawn to a yeast cell comprising a nucleic acid encoding a modified somatostatin receptor, wherein the modification results in failure of the receptor to interact with desensitization machinery.

Group X, claim(s) 1, 2, 4-7, 12, 13, 15-22, 24, 25, 28 and 29, drawn to a yeast cell comprising a nucleic acid encoding a modified Alpha 2a adrenergic receptor, wherein the modification promotes agonist stimulated growth.

Group XI, claim(s) 1, 3 in part, 4-7, 12, 13, 15-21, 23 in part, 24, 25, 28 and 29, drawn to a yeast cell comprising a nucleic acid encoding a modified Alpha 2a adrenergic receptor, wherein the modification results in improved coupling between the receptor and a G protein.

Group XII, claim(s) 1, 3 in part, 4-7, 12, 13, 15-21, 23 in part, 24, 25, 28 and 29, drawn to a yeast cell comprising a nucleic acid encoding a modified Alpha 2a adrenergic receptor, wherein the modification results in failure of the receptor to interact with desensitization machinery.

Group XIII, claim(s) 1, 2, 4-6, 8, 13, 15-22, 24, 25, 28 and 29, drawn to a yeast cell comprising a nucleic acid encoding a modified serotonin receptor, wherein the modification promotes agonist stimulated growth.

Group XIV, claim(s) 1, 3 in part, 4-6, 8, 13, 15-21, 23 in part, 24, 25, 28 and 29, drawn to a yeast cell comprising a nucleic acid encoding a modified serotonin receptor, wherein the modification results in improved coupling between the receptor and a G protein.

Group XV, claim(s) 1, 3 in part, 4-6, 8, 13, 15-21, 23 in part, 24, 25, 28 and 29, drawn to a yeast cell comprising a nucleic acid encoding a modified serotonin receptor, wherein the modification results in failure of the receptor to interact with desensitization machinery.

Group XVI, claim(s) 21, 22 and 25-29, drawn to a yeast cell comprising a heterologous GPCR, wherein the GPCR is a modified neurotensin receptor, and has a deletion in an intracellular domain, which results in improved agonist stimulated growth.

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Group XVII, claim(s) 21, 23 in part, and 25-29, drawn to a yeast cell comprising a heterologous GPCR, wherein the GPCR is a modified neurotensin receptor, and has a deletion in an intracellular domain, which results in improved coupling between the receptor and a G protein.

Group XVIII, claim(s) 21, 23 in part, and 25-29, drawn to a yeast cell comprising a heterologous GPCR, wherein the GPCR is a modified neurotensin receptor, and has a deletion in an intracellular domain, which results in failure of the receptor to interact with desensitization machinery.

The inventions listed as Groups I-XVIII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Pursuant to 37 C.F.R., the main invention in the instant application comprises the first-recited product, a yeast cell comprising a nucleic acid encoding a modified muscarinic acetylcholine receptor with an improved functional response in promoting agonist stimulated growth. The additional products of Groups II-XVIII inventions do not relate to a single inventive concept under PCT Rule 13.1 because they are directed to a yeast cell comprising a nucleic acid encoding distinct modified receptors, which are different chemical and structural entities (different GPCRs), and/or have distinct functional responses. As such, they do not share the same technical feature within the meaning of PCT Rule 13.2, and thus, do not relate to a single invention concept within the meaning of PCT Rule 13.1.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

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**Advisory Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dong Jiang whose telephone number is 703-305-1345. The examiner can normally be reached on 9:30 am - 7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler can be reached on 703-308-6465. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-0294 for regular communications and 703-308-4242 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

A handwritten signature in cursive script, reading "Lorraine Spector". The signature is written in black ink and is positioned above the typed name and title.

LORRAINE SPECTOR  
PRIMARY EXAMINER

Dong Jiang, Ph.D.  
December 26, 2002